

Atty. Docket No. 43945 (prior docket no. 1710.24)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re Application of

0 7 2003

John M. Belcea : Group Art Unit: 2661

Serial No.: 09/847,169 : Examiner: Olms, Douglas W.

Filed: May 3, 2001

FOR: Time Division Protocol For An Ad-Hoc,

Peer-To-Peer Radio Network Having Coordinating Channel Access To Shared Parallel Data Channels With Separate

Reservation Channel

RECEIVED

APR 0 8 2003

Technology Center 2600

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with 37 C.F.R. §§1.56 and 1.97-1.98, Applicants request that the Examiner consider the documents listed on the attached PTO-1449 Forms, which may be deemed material to the examination of the above-identified application. All of the documents cited on the attached PTO-1449 Forms are of record in parent application Serial No. 09/815,157, filed March 22, 2001, and therefore, copies of these items are not being provided in accordance with 37 C.F.R. 1.98(d)(2).

All documents, with the exception of French Patent FR2683326, are in English and require no statement of relevance. Regarding French Patent FR2683326, an English abstract is provided as a brief statement of relevance to the above identified Application as required under

37 C.F.R. § 1.98. Also, since the present Information Disclosure Statement is being filed prior to issuance of a first Office Action on the merits, no certification under 37 C.F.R. §§1.97 (e) or fee under 37 C.F.R. §1.17(b) is required.

The Examiner is requested to consider the attached documents in connection with the above-identified application and to return a copy of Form PTO-1449 to the Applicants with the Examiner's initials in the spaces provided.

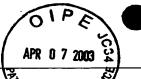
Submission of this Information Disclosure Statement does not constitute an admission by the Applicants as to the materiality of the attached documents to the application, nor do the Applicants waive any right to challenge the validity of the documents as prior art should such action be deemed appropriate.

Respectfully submitted,

Ronald S. Grubb Attorney for Applicant Reg. No. 48,672

Roylance, Abrams, Berdo & Goodman, L.L.P. 1300 19th Street, N.W., Suite 600 Washington, D.C. 20036-2680 (202) 659-9076

Dated: 4001 7 , 2003



Form PTO-1449 J.S. DEPARTMENT OF COMMERCE PATENT AND EMARK OFFICE

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO. 43945	SERIAL NO. 09/847,169
APPLICANT	
John M. Belcea	
FILING DATE	GROUP
May 3, 2001	2661

U.S. Patent Documents

Examiner		T 0.5. 1 a.	ent Documents		Sub-	Filing
Initial	Patent No.	Date	Patentee	Class	class	Date
	6,359,872	03/19/2002	Mahany et al.	370	338	10/28/1997
	6,349,210	02/19/2002	Li	455	450	11/03/2000
	6,349,091	02/19/2002	Li	370	238	11/07/2000
	6,327,300	12/04/2001	Souissi et al.	375	219	10/25/1999
	6,304,556	10/16/2001	Haas	370	254	08/24/1998
	6,285,892	09/04/2001	Hulyalkar	455	574	11/24/1998
	6,275,707	08/14/2001	Reed et al.	455	456	10/08/1999
	6,249,516	06/19/2001	Brownrigg et al.	370	338	01/27/2000
	6,246,875	06/12/2001	Seazholtz et al.	455	432	03/26/1999
	6,240,294	05/29/2001	Hamilton et al.	455	456	05/30/1997
	6,223,240	04/24/2001	Odenwald et al.	710	129	01/31/2000
	6,222,463	04/24/2001	Rai	340	928	06/25/1998
	6,208,870	03/27/2001	Lorello et al.	455	466	06/01/1999
	6,192,230	02/20/2001	Van Bokhorst et al.	455	343	09/27/1993
	6,192,053	02/20/2001	Angelico et al.	370	448	09/07/1995
	6,178,337	01/23/2001	Spartz et al.	455	561	06/19/1997
	6,163,699	12/19/2000	Naor et al.	455	453	09/15/1997
	6,132,306	10/17/2000	Trompower	453	11.1	03/29/1996
	6,122,690	09/19/2000	Nannetti et al.	710	102	04/17/1998
	6,115,580	09/05/2000	Chuprun et al.	455	1	09/08/1998
	6,108,738	08/22/2000	Chambers et al.	710	113	06/10/1997
	6,078,566	06/20/2000	Kikinis	370	286	04/28/1998
	6,067,297	05/23/2000	Beach	370	389	06/28/1996
	6,067,291	05/23/2000	Kamerman et al.	370	338	09/23/1997
	6,064,626	05/16/2000	Stevens	365	233	07/31/1998
	6,052,752	04/18/2000	Kwon	710	126	11/14/1996
	6,052,594	04/18/2000	Chuang et al.	455	450	04/30/1997
	6,047,330	04/04/2000	Stracke Jr.	709	238	01/20/1998
	6,044,062	03/28/2000	Brownrigg et al.	370	238	12/06/1996
	6,034,542	03/07/2000	Ridgeway	326	39	10/14/1997
	6,029,217	02/22/2000	Arimilli et al.	710	107	10/03/1994
	5,991,279	12/23/1999	Haugli et al.	370	311	12/04/1996
	5,987,033	11/16/1999	Boer et al.	370	445	09/08/1997

RECEIVER

APR 0 8 2003

Technology Center 2



INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO. 43945	SERIAL NO. 09/847,169
APPLICANT	
John M. Belcea	
FILING DATE	GROUP
May 3, 2001	2661

U.S.	Patent	Documents	

		U.S. Pat	tent Documents			
Examiner					Sub-	Filing
Initial	Patent No.	Date	Patentee	Class	class	Date
					<u>. </u>	<u> </u>
	5,936,953	08/10/1999	Simmons	370	364	12/18/1997
	5,909,651	06/01/1999	Chander et al.	455	466	05/05/1997
	5,903,559	05/11/1999	Acharya et al.	370	355	12/20/1996
	5,896,561	04/20/1999	Schrader et al.	455	67.1	12/23/1996
	5,886,992	03/23/1999	Raatikainen et al.	370	410	04/15/1997
	5,881,372	03/09/1999	Kruys	455	113	12/01/1995
	5,881,095	03/09/1999	Cadd	375	202	05/01/1997
	5,877,724	03/03/1999	Davis	342	357	03/25/1997
	5,870,350	02/09/1999	Bertin et al.	365	233	05/21/1997
	5,857,084	01/05/1999	Klein	395	309	10/02/1996
	5,845,097	12/01/1998	Kang et al.	395	297	06/03/1996
	5,844,905	12/01/1998	McKay et al.	370	443	07/09/1996
	5,822,309	10/13/1998	Ayanoglu et al.	370	315	06/15/1995
	5,809,518	09/15/1998	Lee	711	115	05/20/1996
	5,805,977	09/08/1998	Hill et al.	455	31.3	04/01/1996
	5,805,842	09/08/1998	Nagarajet al.	395	306	09/26/1995
	5,805,593	09/08/1998	Busche	370	396	09/26/1995
	5,796,741	08/18/1998	Saito et al.	370	439	03/05/1996
···	5,796,732	08/18/1998	Mazzola et al.	370	362	03/28/1996
	5,794,154	08/11/1998	Bar-On et al.	455	509	07/26/1996
	5,787,080	07/28/1998	Hulyalkar et al.	370	348	06/03/1996
	5,781,540	07/14/1998	Malcolm et al.	370	321	06/30/1995
	5,774,876	06/30/1998	Wooley et al.	705	28	06/26/1996
	5,745,483	04/28/1998	Nakagawa et al.	370	335	09/29/1995
	5,717,689	02/10/1998	Ayanoglu	370	349	10/10/1995
	5,706,428	01/06/1998	Boer et al.	395	200	03/14/1996
	5,701,294	12/23/1997	Ward et al.	370	252	10/02/1995
	5,696,903	12/09/1997	Mahany	395	200.58	04/29/1994
	5,687,194	11/11/1997	Paneth et al.	375	283	04/22/1993
	5,684,794	11/04/1997	Lopez et al.	370	337	01/25/1996
	5,680,392	10/21/1997	Semaan Semaan	370	261	01/16/1996
		07/29/1997	Sharony		227	03/26/1996
	5,652,751			370		
	5,631,897	05/20/1997	Pacheco et al.	370	237	10/01/1993
	5,627,976	05/06/1997	McFarland et al.	395	308	03/20/1995
	5,623,495	04/22/1997	Eng et al.	370	397	06/15/1995
	5,621,732	04/15/1997	Osawa	370	79	04/18/1995
	5,618,045	04/08/1997	Kagan et al.	463	40	02/08/1995
	5,615,212	03/25/1997	Ruszczyk et al.	370	433	09/11/1995
	1 - , ,				CEIVE	

RECEIVED

APR 0 8 2003

Form PTO-1449 PADE ATMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO.	SERIAL NO.
43945	09/847,169
APPLICANT John M. Belcea	
FILING DATE	GROUP
May 3, 2001	2661

				Sub-	Filing
 Patent No.	Date	Patentee	Class	class	Date
				ļ	
5,572,528	11/05/1996	Shuen	370	85.13	03/20/1995
5,555,540	09/10/1996	Radke	370	16.1	02/17/1995
5,555,425	09/10/1996	Zeller et al.	395	800	03/07/1990
 5,517,491	05/14/1996	Nanni et al.	370	29	05/05/1995
 5,502,722	03/26/1996	Fulghum	370	69.1	08/01/1994
 5,424,747	06/13/1995	Chazelas	342	70	04/09/1993
 5,412,654	05/02/1995	Perkins	370	94.1	01/10/1994
5,392,450	02/21/1995	Nossen	455	12.1	01/08/1992
 5,317,566	05/31/1994	Joshi	370	60	08/18/1993
5,241,542	08/31/1993	Natarajan et al.	370	95.3	08/23/1991
 5,233,604	08/03/1993	Ahmadi et al.	370	60	04/28/1992
 5,231,634	07/27/1993	Giles et al.	370	95.1	12/18/1991
5,068,916	11/26/1991	Harrison et al.	455	39	10/29/1990
 5,034,961	07/23/1991	Adams	375	130	06/03/1988
 4,910,521	03/20/1990	Mellon	342	45	08/03/1931
 4,747,130	05/24/1988	Но	379	269	12/17/1985
4,742,357	05/03/1988	Rackley	342	457	09/17/1986
 4,736,371	04/05/1988	Tejima et al.	370	95	12/29/1986
 4,617,656	10/14/1986	Kobayashi et al.	370	74	01/02/1986
4,494,192	01/15/1985	Lew et al.	364	200	07/21/1982

Published U.S. Patent Application

Pub. No.	Pub. Date	Patentee	Class	Sub- class	Filing Date
2001/0053699	12/20/2001	McCrady et al.	455	513	02/06/2001

Foreign Patent Documents or Foreign Patent Applications

Document	Publication Country or			Sub-	Trans	lation
 No.	Date	Patent Office	Class	class	Yes	No
EP 0513841 A2	11/19/1992	EPO		 	X	
EP 0924890 A2	06/23/1999	EPO			X	
EP 0627827 A2	12/07/1994	EPO			X	
WO 9912302	03/11/1999	WIPO			X	
WO 9839936	09/11/1998	WIPO			X	

RECEIVED

APR 0 8 2003

Technology Center 260(

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

APR 0 7 2003

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO. 43945	SERIAL NO. 09/847,169
APPLICANT John M. Belcea	
FILING DATE	GROUP
May 3, 2001	2661

Foreign Patent Documents or Foreign Patent Applications Publication Country or Document Sub-Translation Date Patent Office No. Class class Yes No WO 9724005 07/03/1997 WIPO 03/21/1996 **WIPO** X WO 9608884 WO 0235253 05/02/2002 **WIPO** WO 0137483 05/25/2001 **WIPO** X **WIPO** \mathbf{X} WO 0137482 05/25/2001 WO 0137481 05/25/2001 **WIPO** \mathbf{X} X 05/17/2001 WIPO WO 0135567 WO 0133770 05/10/2001 WIPO X X WO 0110154 02/08/2001 **WIPO** WO 0034932 06/15/2000 **WIPO** \mathbf{X} CA 2132180 03/16/1996 $\overline{\mathbf{X}}$ Canada FR 2683326 07/05/1993 X France

Other Documents (including Author, Title, Date, Pertinent Pages, etc.

	011	for Documents (metating Author, 1 the, Date, 1 of them 1 ages, etc.
Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
		Wong et al., "Soft Handoffs in CDMA Mobile Systems", December 1997, IEEE
		Personal Communications
		Wong et al., "A Pattern Recognition System for Handoff Algorithms", July 2000,
		IEEE Journal on Selected Areas in Communications, vol. 18, no. 7
		Andras G. Valko, "Cellular IP: A New Approach to Internet Host Mobility", January
		1999, ACM Computer Communication Review
		Richard North, Dale Bryan and Dennis Baker, "Wireless Networked Radios:
		Comparison of Military, Commercial, and R&D Protocols", February 28-March 3,
		1999, 2 nd Annual UCSD Conference on Wireless Communications, San Diego CA
		Benjamin B. Peterson, Chris Kmiecik, Richard Hartnett, Patrick M. Thompson, Jose Mendoza and Hung Nguyen, "Spread Spectrum Indoor Geolocation", August 1998, Navigation: Journal of the Institute of Navigation, vol. 45, no. 2, summer 1998

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw Line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

RECEIVED

APR 0 8 2003

Technology Center 260

FORM PTO-1449 (Modified)

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE **STATEMENT**

(Use several sheets if necessary)

ATTY, DOCKET NO. 43945

APPLICANT. John M. Belcea

REFER	ENCE	DE	EX3	NA.	TK	ж			U.S. P.	ATENT	1 5/3/ DOCUMENT	72001].	PAROUP 2	661				
EXAMPLES JACTS B		PERMUNITIFICACION				DOCUMENT NUMBER						DATE		KUE .	18	CLASS			DATE
	<u> </u>	5	9	4	3	3	2	2	8/99	May	or,et al	·	370	280	F APTH	CPRIATE			
	M											<u> </u>	370	200	 	·			
	K			L									 	┤	 				
	<i>N</i>												 	 	 				
	Æ	_			_									 	 				
	- F	-		_	_	_									 				
	<u> 141</u>	-	_		<u> </u>	_	_				·			 	 				
	<u> </u>	-	H	Н	_							<u>-</u>			 				
	- ~	-		\vdash	-	\vdash		_		<u> </u>				1	 				
	- K	\vdash		Н	\vdash		\vdash			 				1.					
				ليا		ш	Ļ		25:000			··				·			
									HEIGN	PATE	NT DOCU	MENTS				•			
		FEETH INSERTOR		CATE		COLNIRY	arz	25072	HOLLYSYALL										
Ä	Æ			٦			Т	7							YES	Ю			
	H			7	\exists	٦	1	\dashv											
	Ж	-	ᅱ	-	\dashv	\dashv	+	-			•					·			
		-	4	4	4	_	4	_								 			
	10	_						.						 		 			
	R		- 1	- 1			Т							ļ		<u> </u>			
	ОТН	ER			AF	IT	(lp/	 ::!:	ding A	.06	774			I					
		7	11./			- 3	,		C. C	naior	, Title, Dat	o, Portir	iont Pa	ges, Etc	.)				
	AR .	4	-',	1 /	161	<u> </u>	ew.	to	Curr	ent	Routing.	Protoco	ols fo	r Ad-H	ос м	0011			
		4	وزلا	ce.	les	22	Ne	ı tı	wrksu	Ro	yer, et	21 11-	iv c	f Col÷	£.//				
İ	1	ŀ	'Ti	ie.	Dy	ma	ami	.c	Sourc	e Ro	uting Pr	otocol	for M	obile	т.:. Ад н	oc N			
. [*	- 1																	
		4	rE]	F	M/	/NI	T	.Wc	rking	Gro	up;Josh	Broch,	et al	., 12/	98.				
		- 1						•											
ı	AT	7	£O C	ı٧٠	∙ ∪≀	5.1	ιχτ	· · ·	Mobit	le. A	ance Vec d Hoc Ne	tworks	200	 -	ıetf	-man			
				`h.	ırl	e	E_E	<u>,</u>	Perki	ns.	et al.,	March 2	2. 200	1.	ro ab	,			
EXAMIN	ER												_,						

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Information Disclosure Statement—Section 9 PTO-1449 (Modified) [6-1]—

APR 0 8 2003

374

FORM PTO-1449 (Modified)

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE **STATEMENT**

reral sheets if necessary)

ATTY, DOCKET NO. 43945

SERIAL NO. 847,169

APPLICANT

JOHN M. **BELCEA**

FIUNG DATE

								5/3/2001	1 '	GROUP 2	1661		
REFER	ENCE	DE	NDK	ATK	ЙС		U.S. PA	ENT DOCUMENTS	l	-	 -		
ETIVL			100:	JE (T	KUM	9ER	DATE	KWE	GASS	5 mar. 1 m		3 DATE	- :
	W	\sqcup		$oxed{\mathbb{L}}$	\prod	\prod			1 uss	EMOTES	FAM	OPPLATE	
	A	Ц							 		 	<u> </u>	-
	K	Ш	\bot	\perp		\prod				-{	ļ		-
	æ		\perp	\perp	$oxed{oxed}$					-			-
	Æ	Ш	4	\perp		\prod			 		 		-
	NF		4	4_	丄	$oldsymbol{ol}}}}}}}}}}}}}}}}}}$		•	 		┤		_ `
	M		4	4	╀	- -			1	 	┼─		
	W		-	+	4	╀	4		1	1	 		-
	~ ~		+	+-	+-	╀	 		1	1	 		-
	~		╬	╬	╂	╂╼╂╼					1-		-
		للا				Щ.							-
						<u> </u>	HEIGH P	ATENT DOCUMENTS		•		•	-
l			1001	ÐII		351	CACTE	Marry	T	1	TRAX	HOTAE	•
		_					-	COLATRY	ara	SECTE	YES		-
	Æ			1		\sqcap			 	 	15	CH	-
1	H		十	T		一	1	•	 		<u> </u>		_
	· XX	\Box	+	+	1	- -	 					•	•
	<u> </u>	\vdash	+	+	╂—	- -	 						-
		\sqcup	4	1_	1	1	<u> </u>		1	-	1-	1-	
	<i>R</i>	Ш	丄				1 7		 	-	 -	 	-
	OTH	IER		A	RT	(Inc	ludino Au	thor, Title, Date, Pert		<u> </u>		<u></u>	_
								, riue, Date, Port	inent Pi	ages, Etc	<u> </u>		
	45		'Up1	im	LLZ	ed l	ink Sta	te Routing Protoc	co1", "	TETE MA	NET	Work	- ing
ļ	AR	T		ıμ.	>	riil]	ттИБе да	cquet, et al, Sel	tembe	r 2, 20)01-		-
	<i>~</i>		TO					_	•				
											two	·ks"	·
	A		'The	e D)yn	amic	Source	Routing for Mob	ile Ad	Hoc Ne		ks",	IE
			'The	e D)yn	amic	Source		ile Ad	Hoc Ne		ks",	
			'The	e D)yn	amic	Source	Routing for Mob	ile Ad	Hoc Ne			
	A		'The	e D)yn	amic	Source	Routing for Mob	ile Ad	Hoc Ne			
EXAM	AZ AT		'The	e D)yn	amic	Source	Routing for Mob	ile Ad	Hoc Ne			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Information Disclosure Statement-Section 9 PTO-1449 (Modified)

APR 0 8 2003

PORM PTO-1449 (Modified

1.

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY, DOCY 43945

SERIAL HO. 09/847,169

APPLICANT

John M. Belcea

APR 0 7 2003

the several sheets if necessary)

FILING DATE 5/3/2001 **GROUP** 2661

EXICE DESIGNATION

U.S. PATENT DOCUMENTS

EXHER PARKE			Œ	22.6	er k	116	6 1		DATE	W	ansa	anana	FLHDCATE F APPROPRATE	
	Ж	5	5	3	3	0	2	6	7/96	Ahmadi, et al.	370	94		
	H	5	6	4	4	5	7 '	6	7/97	Bauchot, et al.	370	437		
· · · · · · · · · · · · · · · · · · ·	XC	5	7	4	8	6	2	4	5/98	Kondo	370	347.		
	Ŋ	5	7	8	7	0	7	6	7/98	Anderson, et al.	370	294		
	Æ	5	9	8_	7	0	1	1	11/99	Toh	370	331	-	
	¥	6	0	1	6	3	1	1	1/00	Gilbert, et al.	370	280		
	Ю	6	0	2	8	8	5	3	2/00	Haartsen	370	338		
	서	6	0	2	9	0	7	4	2/00	Irvin	4557	571	 	
· · · · · · · · · · · · · · · · · · ·	H	6	0	5	8	1	0	6	5/00	Cudak, et al.	370	313		
	n	6	0	8	8	3	3	7	7/00	Eastmond, et al.	370	·280	1	
	K	6	0	9	7	7	0	4	8/00	Jackson, et al.	370	280		

FOREIGN PATENT DOCUMENTS

•		 m:	-	H	331	CAJE	מאואן	CLASS	SEUTZ	BYYLL	HOTIL
			7.7			 	waini	uass	genvo	YES	CH
	H.					1 - 1	RECEIVE	n ·			
	H			Τ			APR 0 8 20	03			
	Ж						Technology Cente	 			
	S	1								-	
	K		T						1	-	-

OTHER

ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	H	"Toplogy Control of Multihop Wireless Networks using Transmit Power Adjustment", by Ram Ramanathan and Regina Rosales-Hain; BBN Techn-
		ologies (Division of GTE), Cambridge, Mass. 1997.
	A.	"Reversing the Collision—Avoidance Handshake in Wireless Networks" by J.J. Garcia—Luna—Aceves and Asimmakis Tzamaloukas; Baskin School
		of Engineeering, University of Calofornia, Santa Cruz, 1997
E		"Self-Organizing, Self-Healing Wireless Networks", by Chip Elliot and Bob Helle; BBN Technologies, Cambridge, Mass:
	AT.	IEEE, 2000

PORM PTO-1449 (Modified ATTY, DOCY 09/847,169 43945 LIST OF PATENTS AND PUBLICATIONS FOR APPLICATES INFORMATION DISCLOSURE **APPLICANT 8TATEMENT** John M. Belcea (Use several sheets if necessary) APR 0 7 2003 FILING DATE **QHOUP** 2661 THANK PENCE DESIGNATION U.S. PATENT DOCUMENTS BULLHER **FLHOCUTE** KIM DOCUBIT KLASER DATE XUE OT3 ETTORES F APPROPRIATE W 4 2 8/00 Robert, et al. 370 389 Ж 6 8 3 6 8/00 Agrawal, etal. 370 311 K 6 1 30 8 811 10/00 Stiller, et al. 370 238 D Æ Æ K H IJ FOREIGH PATENT DOCUMENTS KILLEKAT HELL INGLICE ME **WATER** arz SXIXS YES B H H RECEIVED APR 0 8 2003 Ю Technology Center 2600 K ART (Including Author, Title, Date, Perlinent Pages, Etc.) OTHER "A Performance Comparison of Multi-Hop Wireless Ad Hoc Netwrk Routing Protocols", by Josh Broch, et al., Carnegie Mellon University, M Pttsburgh, Pa., Proceedings of the Fourth Annual ACM/IEEE International Conference on Mobile-Computing and Notworking; 1998. "USAP:A Unifying Dynamic Distributed Multichannel TDMA Slot Assignment Ц Protocol", by C. David Young, Rockwell International, Richardson, Texas "Net Throughput with IEEE 802.11 Wireless LANs"", by Ad Kamerman and IJ

Guido Aben, Lucent Tech., Nieuwegein, The Netherlands

	PORM LIST (~ n (7	, ,	• • •		D4 15	SUC	AT	3. ICHB FOR		ATTY, DOCY		SEI On/	PHUL HO. 1847, 16	9			
0	PEPA	CUIT	'3 IXI	POP	EM	OIT.	H C	NSK	CAUSURE		APPLICATI	APPLICANT John M. Belcea						
PR (7 2003) Use 1	HYBCI	네 화	xec t	z H	nec	***	⊶ γγ) .		FIUNG DATE 5/3/2001		Q.F	10UP 26	61			
TRA	OFTER	ENCE I	CESK	AKE	mo	H			U.S. PATE	HE	DOCUMENTS		1					
_	BYNTHE!		Ω.) (1)	ЭП)	WH3	ER		DATE		KUE	α	123	anana a	FLHOO F APPROP			
_		Ж					·								- 1110			
•	<u> </u>	И					Í											
		K		_	_							 	-					
	· .	Ю		_														
•		Æ		+	 	1_												
•	·	K		╀	┼	-					•	<u> </u>						
. •		 	-	╬	+	╁								<u> </u>	<u> </u>			
•		- N		+	十	╁	-	_				}_		 	 			
. •		l n		\dagger	十	\dagger	 	-				┼		1	 			
		Ж		1	1	1	1	 				╁╴		-		·		
	<u> </u>	٠			•	•.	F	=O	REIGH P.	AT	ENT DOCUMENTS	<u>.l</u>			<u></u>			
			,	· ·	זיכבי	ue	æ			•			TRAKE	KOTA				
	•			~~	-(1)			· 	CAJE	Ì	OUNTA		IYZ	SECTE	YES	CH		
		I A											•		·			
		H	\coprod								RECEIVE	P						
	•	Ж				-					APR 0 8 20	143						
	· · · .	W				T					Technology Cente	r 26	00			-		
	•	K		T	T			1				十			1	-		
		ОТІ	HER		A	\R7	ا) ۲	ncl	uding Au	ıtho	or, Title, Date, Pert	in e	nt Pr	ngas Fi	c.)	J		
		1	TT	"Tr							nting in Wireless Ne					· 		
-		M	-															
	·	-									a-Luna-Aceves, Bask Santa Cruz; 1997.					ing,		
		l li		and	Ew	re- ert	ASS on	ist L.	ed Mesh F Madruga,	Prot Bas	cocol", by J.J. Gardkin School of Engir	cia- neer	Luna- ing,	-Aceves Univers	ity			
		"		of	Ca	lif	orn	ia,	Santa Cr	uz;	1997.							
		1	11	11 0	pti	Mi2	ati	on	of an Ada	apti	ve Link Control Pro	ota	xol fo	or				
		TX.			-			10120	se rauto v	verv	works", by J.R.McChemm. Div.; Ft.Wayne,			_	· · · · · · · · · · · · · · · · · · ·			
						_		-~		. W	Div.; Ft.Wayne,	ΤN	; 1997	•		: -		
	EXA	TIPREH							 		DATE COLIDINE	·~						

sheet 9 of 11

· · · · · · · · · · · · · · · · · · ·					-4	_			 ,		She	et 10 of	11	
PORW LIST O						-	47	4. 12248 FO		ATTY, DOCY	33	TRUL HO.		
4.004	KWI	'3 IX	o An FOR	IMAT	DON DON	-√- O	ない	acaus fo acosuri	₽ (-			1/841,	16/	
- 6)		. 8	TAT	EME	THE					APPLICATE John M. T	Belcea			
TOTAL CAN	ا محل)		4 847	184 0	חח		•••	- 1	•	FILING DATE 5/3/2001	a	ROUP 2	661	
EP.	HCE	DESK	AKE	TICI	Ч			U.S. PA	ואפו	росливиія				
EXHIBITED .	1			•			T	·					PLHO	~
BEILT		α	Dist.	K DE	UCE	R		DATE		KATE	ana	enona	F APPRO	
	Ж													
	K		_											
	K		_					:						
	Ŋ		丄									1		
	Æ		1_		1.									
· 	₩.	- -	-			4		·	<u> </u>	•				
<u> </u>	М		┼	_		4			ļ	· ·				
	<i>H</i> 1		+	-		4	_		ļ					
	 		- -	-	$\vdash \vdash$	_			ļ					
	W	╂╌╂╌	-	-					 		<u> </u>	•		
			٠.	J	щ		-		<u></u>		<u> </u>			
				<u>.</u>		r		HEIGH	PATI	NT DOCUMENTS		· · · · · · · · · · · · · · · · · · ·		-
			י ינות	ווה	H	3 2		CKITE	1	Marry			TRUG	HOTEL
			<u> </u>	~		⊿. 		MIL		COLVIE COLVE	ayz	SELYZ	YES	CH.
	1 12													
•.	H									RECEIVE	D			
	: XX									APR 0 8 200	β		-	-
	()									lechnology Center	ะบีบีปั		1	-
<u>-</u>	K													
	ОТІ	IER		A	RT	(In	cli	uding A	lithe	r, Tille, Date, Perti	J			J
	<u> </u>		"Hi	erai	rchi	C3	11,	- Omani	rucit	Milether Meldle Vice	nont P	ages, Et	C.)	
*	IA.	2	ual	ity.	-of-	Se	TV:	ice Supp	ort"	Multihop Mobile Win by Ram Ramanathan	eress par	vetworks otha Stee	ior Instrup);
·		В	BN	Sys	tems	a	nd	Tech.,	Cambi	idge, Mass. 1995				.
		1 1"	Dyn	ami	C Mu	ilt	in	oint Vi	rtual	Cincuit Committee	nedia T	raffic in	1	
	14	-						Wireles	22 MG	tworks", by Martha I	E. Stee	nstrup; I	BBN Tec	ch.,
	-	╁┼			*							 		
	TT.			· ·										
								٠						
EXAL	DAE'R									DATE COLIDIDED				

•. •/					-4	_	n			she	et	11 of	11			
PORUL I	PTO-1	449 (Mod (Mod	ille(5.		ATTY, DOC: YO).	SERIUL HO.					
mat c	≠ PAT	EHT	44.8	10 P	บยเ	K	A BIASIT	ะดล :	43945		09	1847,10	59			
PE	Con			EME		Dra	ecrosn	RE	APPLICANT							
~ 7 mm ?	hu.	•				•	mary)		John M. Belcea							
0 7 2003							11		FILING DATE 5/3/2001	1	Q.P	IOUP 20	661			
TRAREPE	HCE I	CES	GXV	TIC	Н		U.S. 1	NTENT	DOCUMENTA	l			-			
EXMINER										T			PLHO	AIE		
· BEILT		<u> </u>	<u> </u>	EAT X	ULCE	1	DATE		KILE	an	3	exercise	F APPRO			
	<u> </u>		-	-	4		ļ									
	<i>I</i> 8		-	-	_	4_	<u> </u>						:			
	<u> </u>		- -		-	1.	<u> </u>					·				
	N)				_	_ _	<u> </u>		•							
	Æ	-	- -	-		- -	-									
<u>-</u>	Ю	-	-}-	-										٠.		
	ᄲ	-		-												
	H.		╌	-	$\left \cdot \right $											
	,	-	- -	╁								<u> </u>	<u> </u>	<u> </u>		
	Ж	1	- -	+	H		-{					<u> </u>				
					•	F	DREIG	Y PAT	ENT DOCUMENTS	_ <u></u> }		1	}			
	-	•											TRUS	Im		
·			w.	<u>عبرا ا</u>	HJA	Æ	CAJE	CATE	COLATAY	. On	122	SELICE	S YES			
	H		T	T	П	Т	1						100	(K		
•	H			1		\top		_	RECEIV	ED			-			
	Ж			+		十		_	APR 0 8 20	00B	·		 	-		
	Ю		1	+		-	-		Technology Cente	1			-			
	ЬŞ		1	+		\dashv			33 33110	1000	· ———	-	· · · · · · · · · · · · · · · · · · ·	 		
•	ОТІ	1EB				(104	1	A	- 711 P. A. D.			<u></u>				
	<u> </u>								or, Title, Date, Per							
i	₩		by 2	Llis Zhen	ion yu :	-Avc Fanc	oidance and J	Transm J. Gar	nission Scheduling Cia-Luna-Aceves, U	for Ad	l-Ho	c Networ	ks",			
·		\prod	Sant	ta C	ruz	, Ca	lif.,	997.	old-halla-Aceves, o	IIIAGIE	SILY	or carr	.comia	1		
-			"Qòs	S Ne	two	kir	a with	Adapti	ve Link Control an	d Tact	ica	1 Multi-				
٠	, L	-	Cinn	nie1	301	LWa	He Rao	los", r	y George Vardakas,	et al	,	Communic	ations	3		
	-		-yst	ens	Div	7. C	of Rayti	neón Sy	stems Co., San Die	go, Ca	alif	.; 1997.				
	1,7						 -				-					
	\\		*****	-				···				· · · · · · · · · · · · · · · · · · ·				
	INEB															